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INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

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Applicant's or agent's file reference
cal 85148

FOR FURTHER ACTION

See Notification of Transmittal of International
Preliminary Examination Report (Form PCT/PEA/416)

International application No.
PCT/IB 02/03113

International filing date (day/month/year)
08.08.2002

Priority date (day/month/year)
08.08.2002

International Patent Classification (IPC) or both national classification and IPC
H04Q3/00

Applicant

TECHNOLUX HOLDING S.A. et al.

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand

01.03.2004

Date of completion of this report

03.09.2004

Name and mailing address of the international preliminary examining authority:



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/IB 02/03113

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-19 as originally filed

Claims, Numbers

1-5 received on 06.08.2004 with letter of 06.08.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/B 02/03113**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-5
	No: Claims	
Inventive step (IS)	Yes: Claims	1-5
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-5
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 02/03113

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The invention discloses a telecommunication network (claim 1) being provided for delivering signals and data between a plurality of local accesses, said local accesses including local users, and a plurality of network accesses through local exchanges. The local exchanges include a multi-protocol gateway device and a local routing device. The local accesses are connected through first linking means to local centralising devices, which are in turn connected to the local exchanges through second linking means. The local exchanges are connected through third linking means to the network accesses.

Such a system is disclosed in the closest prior art D1=EP-A-1 117 214 (TERAYON COMM SYSTEMS INC) 18 July 2001 (2001-07-18)

The differences between the document D1 and the invention is the following: the second and third linking means are constituted by bidirectional satellite radio bridges.

The problem solved by such technical features is that in conventional telecommunications systems, the traffic is collected by means of physical connections.

The present solution consists of providing a bidirectional satellite radio bridge between the local user and the first local exchange as well as between the local exchange and the network access. This solution allows to use only one type of connection of the bidirectional satellite type, while only the connection between the local user and the centralising devices (i.e. Multiplexer/Demultiplexer) is not of the radio type.

Therefore, the subject-matter of claims 1-5 is new and inventive.

CLAIMS

1. Telecommunications and telephony network (AT) for
controlling mobile (TC) or fixed peripheral devices at a
customer premises, of the type comprising at least one
5 local area network, at least one local residents' network
(RLC), at least one regional network, at least one national
network and a central network, said telecommunications and
telephony network (AT) being provided for delivering
signals and data between a plurality of local accesses (AL,
10 AL1), including local users (UL), and a plurality of
networks accesses (AG), through local exchanges (CL, CR),
each of said local exchanges (CL, CR) including a multi-
protocol gateway device (GV) for video and audio signals
and data compression and conversion into IP packets bearing
15 IP telephony data flow or data flow from the Internet and a
local routing device (R) for routing said IP telephony data
flow or data flow from the Internet, wherein said local
users (UL) of each local access (AL, AL1) are connected to
local centralising devices (MD) through first linking means
20 (C0) for flowing data and signals, and said local
centralising devices (MD) are in turn connected to said
local exchanges (CL, CR) through second linking means (C1,
C4) for flowing data and signals, while said local
exchanges (CL, CR) are connected to said networks accesses
25 (AG) through third linking means (C2, C41) for flowing data

and signals, characterised in that at least said second (C1, C4) and said third linking means (C2, C41) are constituted by bidirectional satellite radio bridges (RLD, ST).

5 2. Telecommunications and telephony network (AT) as claimed in claim 1, characterised in that said first linking means (C0) are constituted by physical cables, such as telephone twisted pairs or optical fibers.

10 3. Telecommunications and telephony network (AT) as claimed in claim 1, characterised in that said local routing devices (R) are connected to satellite routing devices (RS) or to radio bridges (PR), said radio bridges (PR) being able to provide connection between local residents' networks (RLC).

15 4. Telecommunications and telephony network (AT) as claimed in claim 1, characterised in that each national network is connected to the relative regional network by means of a digital geostationary satellite network.

20 5. Telecommunications and telephony network (AT) as claimed in claim 1, characterised in that each regional network is connected to the relative local residents' network (RLC) by means of a digital bidirectional satellite radio transmission or by means of communication via optical fibres.